

# Ssd update

- Normalization of the gain value
- New method to apply the gain table

# Gain wafer table

- 1 gain per wafer (for all ssd -->320 gain)
  - $\text{Gain} = \text{mean\_adc\_sideN} / \text{mean\_adc\_sideP}$
- Processed by reading adc values from P and N sides strips in a given wafer
- But we also write the  $\text{mean\_adc\_side}^*$  per wafer and per chip.
- We have 6 FEE chips per wafer
- So the normalization is to take :
$$\text{mean\_adc\_side}^* = \sum (\text{mean\_adc\_side}^*)_{\text{chip}} / 6$$
- This will define the gain for this wafer.

# Example

- chip 1 0.98957
- chip 2 1.01948
- chip 3 0.983655
- chip 4 0.926841
- chip 5 1.00321
- chip 6 1.03697

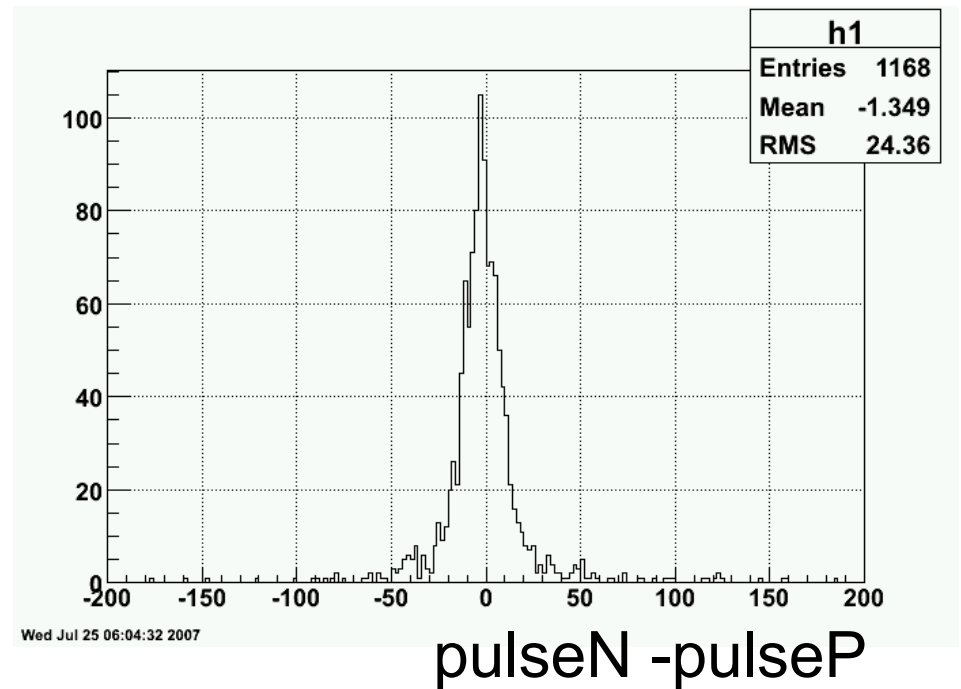
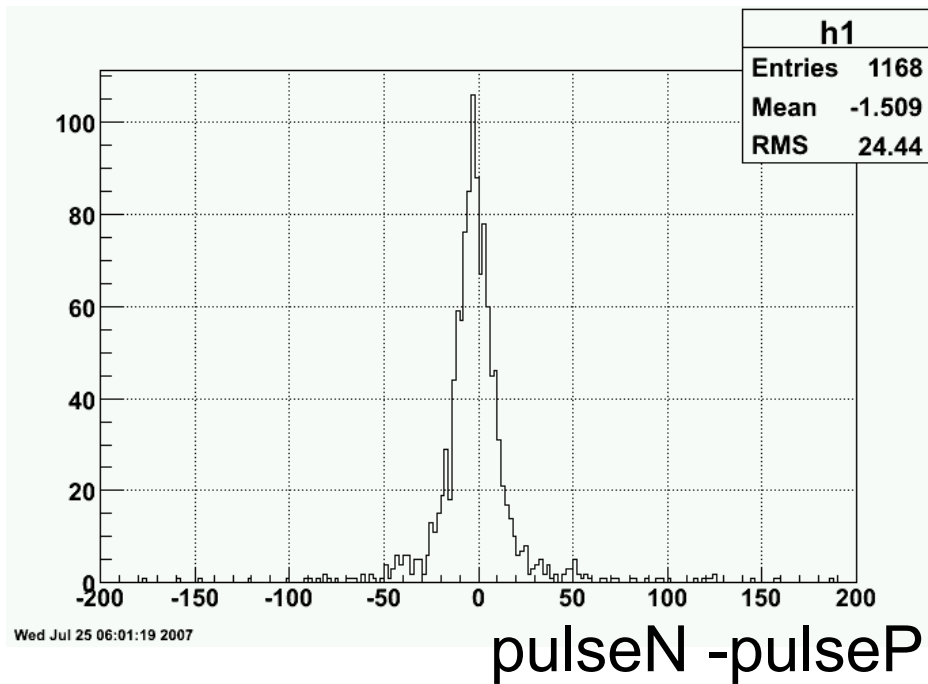
Sum = 0.993288

It has to be compared to the measurement when we calculate over all strips in a wafer :

Gain = 0.991494

1 wafer = 6 gain

# CuCu data

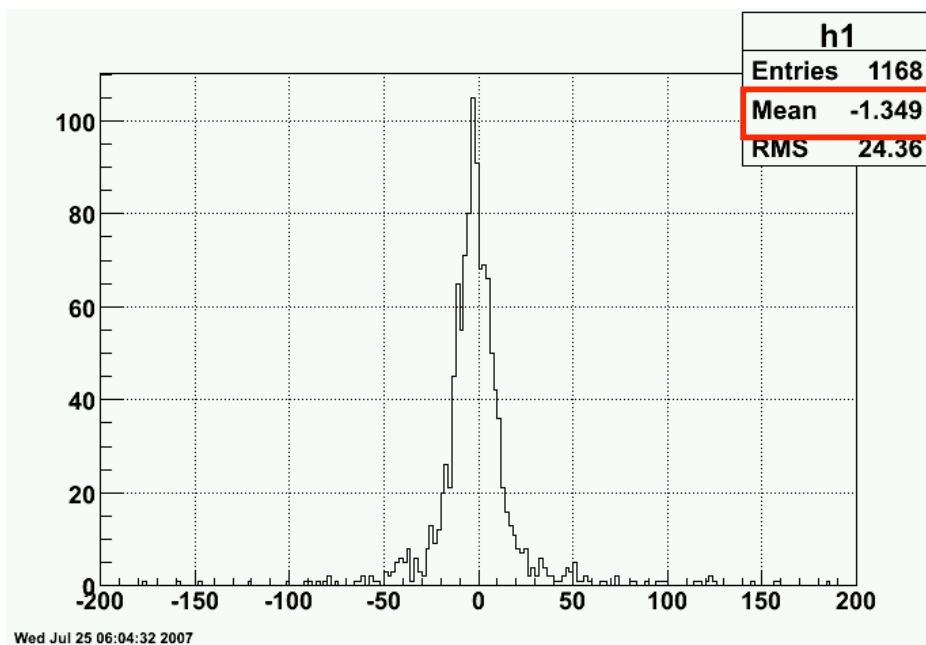


-->small improvement

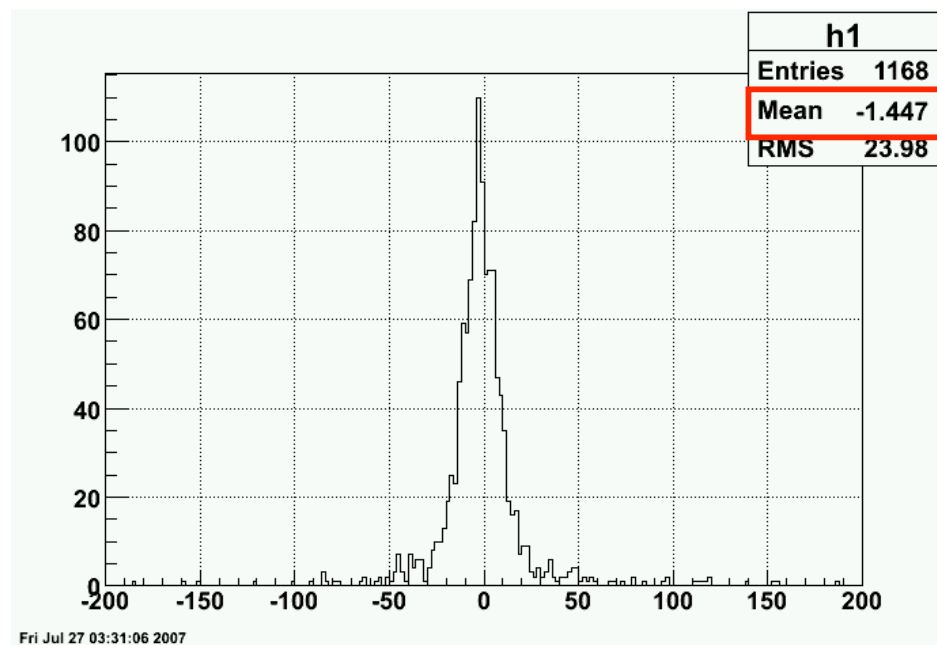
Calibration Meeting  
07-27-2007

Jonathan Bouchet

# New method to apply the gain



Old method  
(rotating vector)



new method  
(scaling)

- also compared with another ladders
- The change are in the same order